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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,342	10/20/2003	Ludwig Busam	CM2536CQ	2901
27752 7590 06/26/2007 THE PROCTER & GAMBLE COMPANY INTELLECTUAL PROPERTY DIVISION - WEST BLDG. WINTON HILL BUSINESS CENTER - BOX 412 6250 CENTER HILL AVENUE CINCINNATI, OH 45224			EXAMINER LONEY, DONALD J	
			ART UNIT 1772	PAPER NUMBER
			MAIL DATE 06/26/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/689,342	Applicant(s) BUSAM ET AL.	
	Examiner Donald Loney	Art Unit 1772	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 4-20 is/are pending in the application.
- 4a) Of the above claim(s) 15-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-12,14,19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>See Continuation Sheet</u> .           |

Continuation of Attachment(s) 6). Other: copy of Invista Fine Denier Staple Fibers Brochure.

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 9, 2007 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 2, 4-12, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 56-140153 in view of Tanaka et al (6506472).

JP 56-140153 discloses a corrugated fiber sheet containing a line pattern of thermo compression bonding and/or welding dots 1. This is considered a pattern line since the applicant, on page 16, lines 5-10 and figure 6 also disclose the line pattern can be dots. The dots connect at least three corrugations per claims 1 and 19 (see figure 7). JP 56-140153 also discloses that the line patterns can be continuous (per claim 7, or solid per claim 19) and other patterns can be adopted. Refer to page 5, lines 14-18. Also, refer to figure 7 along with page 2, last paragraph through page 6, paragraph 3. JP 54-140153 does fail to specifically disclose continuous lines wherein first pattern comprises parallel lines, the second pattern comprises parallel lines and wherein the first set and second set of lines are not parallel to one another and are non-parallel to the corrugation lines per claims 1 and 19. As indicated above, JP '153 does disclose other patterns can be formed.

Tanaka et al discloses that when continuous bonding lines 5 are formed in a fibrous sheet that two sets of parallel lines, wherein one set is not parallel to the other, can be formed in order for the sheet to exhibit excellent bulkiness, resiliency and compressibility characteristics as well as three-dimensional appearance. Refer to figures 3-6 along with column 3, lines 12-24.

There fore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to JP54-140153 to form two sets of parallel bonding lines therein, wherein one set is not parallel to the other, as taught by Tanaka et al, in

order for the sheet to exhibit excellent bulkiness, resiliency and compressibility characteristics as well as three dimensional appearance motivated by the fact JP 54-140153 discloses that other patterns and continuous bonding lines can be formed, of which Tanaka et al shows to be known in the art. With regards to the corrugation lines running parallel to the MD direction this is just a matter of how one looks at the web. From page 10, lines 19-22 the MD direction is discloses as along the length, therefore, one can look at the corrugations as running along the length depending upon how one orients the web. This limitation does not structurally distinguish from the prior art since one can look at the lines as running along the length. With regards to claim 2, the bonding pattern of JP '153 bonds neighboring corrugations (e.g. at least three of them) as shown in figure 7. With regards to claim 4, the lines intersect as shown in figures 1, 3, 4 and 8 in Tanaka et al. With regards to claims 5 and 6, at least, and less than 20 corrugations, at certain points are unbonded as shown in figure 7 of JP '153. With regards to claim 7, the lines are straight as shown by Tanaka et al. With regards to claim 8, the corrugations run in the length direction when looking upon the sheet as having a width and length. This limitation is just relative to how one looks at the sheet. With regards to claim 9, JP '153 teaches that one can have bonding points or lines for the pattern (see page 5, lines 15-18). With regards to the properties of claims 10 and 11 it would be obvious to one of ordinary skill in the art motivated by the fact JP 56-140153 discloses that the bonding is done in order to improve strength, control linting and improve softness, all of which are controlled by the bonding features of the sheet.

With regards to claim 12, the process limitation as to embossing does not structurally distinguish from the heat fusion bonding already disclosed. With regards to claim 20, JP '153 discloses a denier of .5-10 at page 4, second to the last line. Therefore, it would be obvious to use whatever length fiber is needed for a particular application. The examiner has cited a brochure from Invista Products, as a teaching reference, that shows deniers of 1.35 can have lengths of 3.2-3.4cm.

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP '153 in view of Tanaka et al as applied to claim 1, 2, 4-12, 19 and 20 above, and further in view of Easley et al (3653382)

The combination of the primary references teaches the invention substantially as recited except for the corrugations being deformed (i.e. flattened into a pleated type structure) as recited in claim 14 and shown by applicants' figures 4B and 4C. See the 35 U.S.C. 103 rejection above.

Easley et al teaches to form embossed patterned lines 6 that run non-parallel to the flattened corrugations. Refer to figures 1-3 showing a flattened type structure as recited by the applicant and shown in figures 4B and 4C referred to above.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to the combination of JP 56-140153 in view of Tanaka et al to deform the corrugated sheets, as taught by Easley et al, in order to form a flattened type structure (i.e. pleated) therefrom, motivated by the fact Easley et al teaches it is known to emboss the structure with lines 6 that run non-parallel to the flattened areas.

***Response to Arguments***

6. Applicant's arguments filed April 9, 2007 have been fully considered but they are not persuasive. The examiner has explained above how referring to the length is just relative to how one looks at the web and does not structurally distinguish the claimed invention from the prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald Loney whose telephone number is (571) 272-1493. The examiner can normally be reached on Mon, Tues, Thurs and Fri. 8AM-4PM, flex schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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A handwritten signature in black ink, appearing to read "Donald J. Loney", with a stylized flourish at the end.

Donald Loney  
Primary Examiner  
Art Unit 1772

DJL;D.Loney  
04/24/07